

Date: Thursday, 20/11/2008 3:12:01 PM
 User: Julie Dawson

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	STEP STRUT
Job Number :	43575		
Estimate Number :	11937		
P.O. Number :		Part Number :	D2017121
This Issue :	20/11/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D2017 REV E1
First Issue :	1/1	Project Number :	N/A
Previous Run :	33204	Drawing Revision :	E1
	Type :	Material :	
	SMALL / MED FAB	Due Date :	28/12/2008
Written By :		Qty:	4 Um: Each
Checked & Approved By :	<u>JUD 08.11.21</u>		
Comment :	Est D 02.06.19 Update processes (Ref. ECN 435) KJ/RF		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M304TR0750W049	304 RD Tube .750 x .049W
-----	----------------	--------------------------



(P12)

Comment: Qty.: 1.1025 f(s)/Unit Total: 4.4100 f(s)

Punch tube type 304-2B, 3/4" Ø. X .049" wall to length per Dwg. D2017 & spec control D2638

Batch No. M107518

Deburr M109115

③

SB 02/01/08

④

M-L 09/01/12

2.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

S02/01/12

(X)

3.0	POWDER COATING	POWDER COATING
-----	----------------	----------------



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

START TIME: 1:55

OVEN TEMPERATURE: 400°

FINISH TIME: 2:25

FL 09/01/13

④

4.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
-----	-----	---



Comment: INSPECT POWDER COAT

09.01.13

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09.01.12	1	Dim "D" SHOULD BE $\varnothing 0.257$ " PER D2638 *See PAR # 09-002	SB	09/01/12	(4)	OP 09.01.12 per 08/04/12	S 09/01/12

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 20/11/2008 3:12:01 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP STRUT

Job Number: 43575

Part Number: D2017121

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

ST 250

SS 09/01/14 XC

6.0

QC21

FINAL INSPECTION/W/O RELEASE



09/01/15 J

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



JW 09/01/14 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

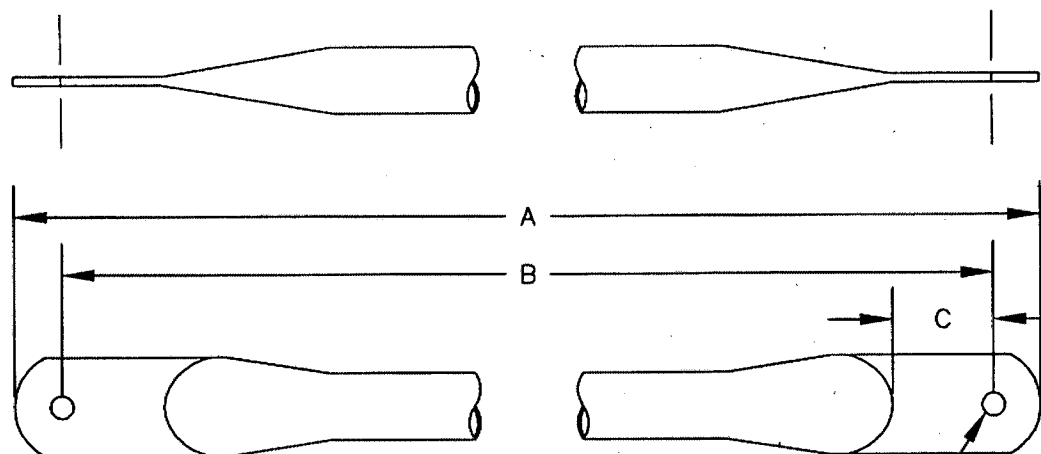
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

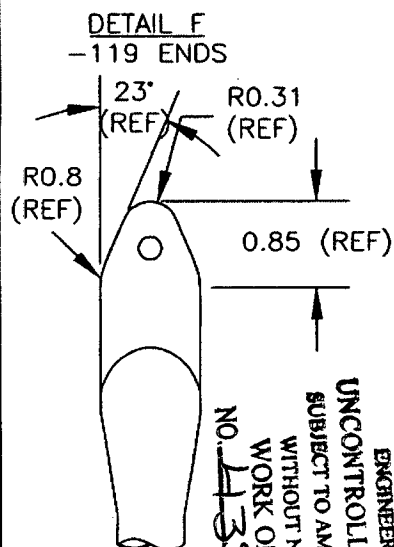


RELEASED
99.03.11 KE



PUNCH ENDS PER
SPEC CTRL D2638
(-119 SEE NOTE)

"D" DIA 0.25 TO BE PUNCHED (TYP. BOTH ENDS)
"E" DIA TO BE OPENED MANUALLY (ONE END ONLY)



Part Number	A	B	C	D	E
D2017-101	17.73	16.93	1.30	0.250	0.312
D2017-103	18.74	17.94	1.30	0.250	0.312
D2017-105	14.95	14.15	1.30	0.250	-
D2017-107	15.61	14.81	1.30	0.250	-
D2017-109	13.93	13.13	1.30	0.250	-
D2017-111	15.30	14.50	1.30	0.250	-
D2017-113	20.50	19.70	1.30	0.250	0.312
D2017-115	12.42	11.62	1.30	0.250	-
D2017-117	13.86	13.06	1.30	0.250	-
D2017-119	26.75	25.95	1.30	0.250	-
D2017-121	12.30	11.50	1.30	0.250	-
D2017-123	12.92	12.12	1.30	0.250	-
D2017-125	19.55	18.75	1.30	0.250	-
D2017-127	20.30	19.50	1.30	0.250	-
D2017-129	31.43	30.63	1.30	0.250	-
D2017-131	19.68	18.88	1.30	0.250	-
D2017-133	30.66	29.86	1.13	0.250	-

NOTE:

FOR D2017-119: PUNCH PER D2638, GRIND ENDS PER DT8360 (SEE DETAIL F FOR REF.)
BEND FLARED ENDS 8° UP/ 8° DOWN

MATERIAL: 304/316/318 SS, 0.75 OD x 0.049 WALL, ENSURE SEAMLESS TUBING IS USED
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

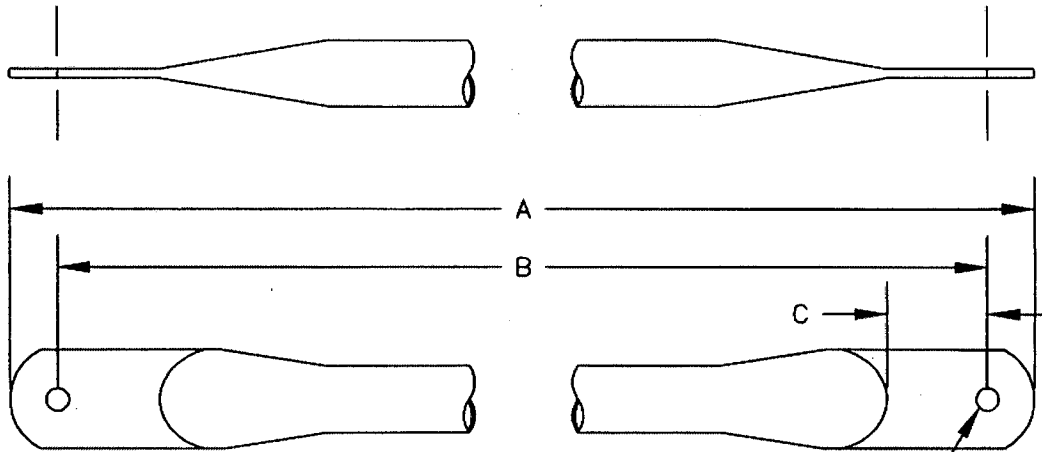
FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 /E1

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
KE	RF	D2017
DATE	TITLE	REV. E
99.04.16	STEP STRUTS	SHEET 1 OF 2
SCALE	NTS	
C	95.01.26	ADDED PARTS
D	96.03.28	ADD PARTS
E	99.04.16	ENDS PUNCHED PER SPEC CTRL; -119 CHANGE (TSR A897)
E1	02.03.22	ADD FINISH



DESIGN	BW	DRAWN BY	RT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	KE	APPROVED	[Signature]	
DATE	99.04.16	TITLE	D2017	REV. E
STEP STRUTS				SHEET 2 OF 2
				SCALE
				NTS

RELEASED
49.05.11 KE



"D" DIA 0.25 TO BE PUNCHED (TYP. BOTH ENDS)

Part Number	A	B	C	D
D2017-201	21.31	20.51	1.30	0.250
D2017-203	16.39	15.59	1.30	0.250
D2017-205	16.53	15.73	1.30	0.250
D2017-207	13.85	13.05	1.30	0.250
D2017-209	15.64	15.33	1.30	0.250
D2017-211	15.67	14.87	1.30	0.250
D2017-213	15.82	15.02	1.30	0.250
D2017-215	16.47	15.67	1.30	0.250
D2017-217	16.70	15.90	1.30	0.250
D2017-219	13.65	12.85	1.30	0.250
D2017-221	13.58	12.78	1.30	0.250
D2017-223	12.95	12.15	1.30	0.250
D2017-225	13.99	13.19	1.30	0.250
D2017-227	30.67	29.87	1.30	0.250

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 43575

NOTE:

MATERIAL: 304/316/318 SS, 0.75 OD x 0.049 WALL, ENSURE SEAMLESS TUBING IS USED
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

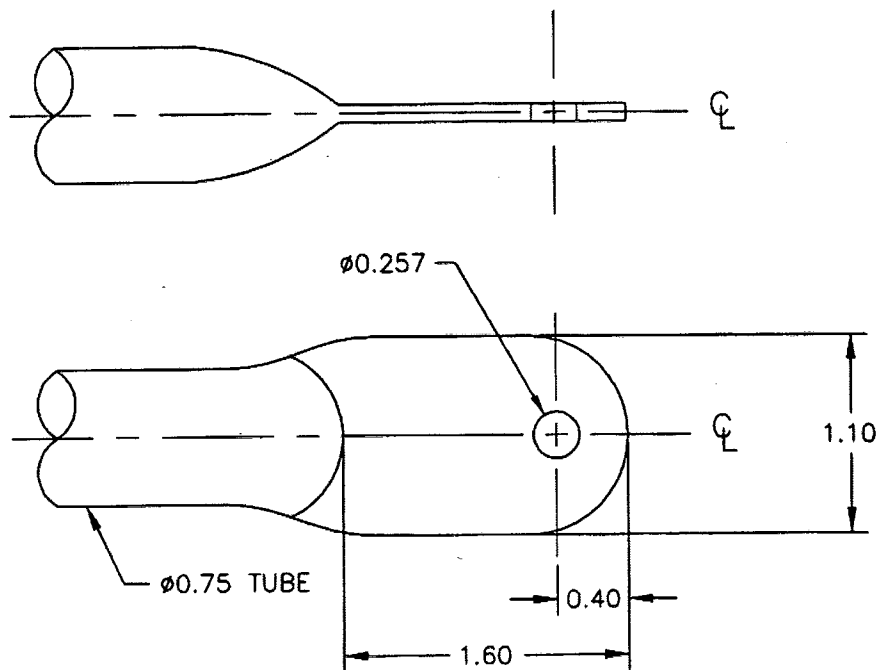
FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 /EI



DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED DM	APPROVED KE	DRAWING NO. D2638	REV. A SHEET 1 OF 1
DATE 98.04.28		TITLE PUNCH DT8117 SPEC CONTROL	SCALE 1:1
A	98.04.28	NEW ISSUE	

RELEASED
98/07/05 KE

SPECIFICATION CONTROL DRAWING
FOR PUNCH DT8117



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 4358